## CM Crockett Park's Environmental Educational Programs

Are you looking for some fun and creative ways to engage your students?

Then come out and experience the natural beauty of Crockett Park.

All Programs that are listed comply with the Virginia Standards of Learning (SOL's). The list of which SOL's each activity meets can be supplied.

Each program is \$3 per activity per student and must be scheduled in advance by calling the number listed above. CM Crockett Park is located in Midland Virginia and is part of the Fauquier County Parks and Recreation Department.

Nature Colors and Shapes Cards (K - 1st grade)

Duration: 15 - 30 minutes

Activity type: Walking

Objective: Students will observe and become aware of the ranges of colors and shapes in the natural environment of the park.

Blindfold Surprise (K - 2nd grade)

Duration: 15 - 45 minutes

Activity type: Sitting

Objective: Students will heighten awareness of and curiosity about natural objects by blocking sight. This activity is designed to increase sensitivity to hearing, smell and touch. As well as increase verbal communication skills.

Web of Life (K – 3rdgrades)

Duration: 15 - 30 minutes

Activity type: Standing, sitting

Objective: Students will learn that everything in a natural community is related to each other. They will also see what happens when something disappears from an ecological group.

Whose Clues? (K - 10 grades)

Duration: 1 hour

Activity type: walking, standing



Objective: The scientific approach to problem solving involves looking for clues. Students will investigate interrelationships between animals and their environment by: observing clues to wildlife activities; inferring about the types of wildlife present in an area and their activities.

Hide and Seek (K - 7 grades)

Duration: 45 - 60 minutes

Activity type: Walking - game

Objective: This activity takes an old favorite and adds an educational twist. The students will discover and recognize the importance of how adaptations can help an animal from being seen. Students will investigate variations in color patterns, body form and movement which allow for camouflage by: observing organisms in relation to environmental setting, simulating predator-prey dynamics; inferring explanations for camouflage success.

Wetland in a Pan (K - 9 grades) {Indoor activity or warm weather}

Duration: 1 - 2hours for demonstration and discussion

Activity type: Sitting, building

Objective: Wetlands help filter silt and pollutants from rain runoff as well as often reducing flood damage. Wetlands have some critical functions. Students will investigate the interrelationship among precipitation, runoff and wetlands by: modeling and observing flood buffering and filtering effects of wetlands in class.

Feathered Feeders (K - 9 grades)

Duration: 30 - 45 minutes

Activity type: Walking, running - game

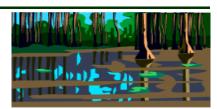
Objective: This activity asks the students to think like hungry birds. Students will investigate variation in bird beaks and the interrelationships of form and function by: classifying birds with similar beak shapes; inferring about possible bird food based on beak shapes; locating and identifying possible bird foods in the field.

Going...Going (2 - 9 grades)

Duration: 20 - 30 minutes for the game, 1 hour for walk

Activity type: Walking, standing

Objective: The health of waterways and drinking water are affected by soil particles (silt/sediment) that enter the water. The sediment chokes fish, blocks sunlight and buries and smothers aquatic plants and animals. Students will investigate equilibrium in erosion and deposition by: predicting effects of moving water on soil, modeling an erosion simulation; observing results of a test, inferring causes and effects; planning for a personal action to save soil and hypothesizing about erosion variables.





Population Game (3 - 5 grades)

Duration: 45 - 60 minutes

Activity type: Running

Objective: Students will discover the relationship between population size and food supply, while playing the role of a deer. They will also learn the concepts of carrying capacity, home range, dispersal and population fluctuation and to learn, record and analyze data.

Little Limnologists (3 - 6 grades)

Duration: 1 hour (minimum suggested)

Activity type: Walking, standing

Objective: Limnology is the study of fresh marshy water such as ponds. Students will investigate variation in pond inhabitants by: collecting specimens from several areas of a pond; observing and making field notes about the specimens in detail; classifying and identifying the specimens; and organizing and producing a class "field guide".

Endangered Populations (3 - 6 grades)

Duration: 30 - 45 minutes for game and discussion

Activity type: Running, walking

Objective: Students will be introduced to the pressures that bring about the decline of populations. They will investigate changes in population levels by modeling the behavior of a species confronted with impediments to survival.

Treasured Maps (3 - 12 grades)

Duration: 1 - 2 hours

Activity type: Walking, standing - orienteering exercise

Objective: Maps are used in various ways, tracking migration, to explore a nature trail, or to document different landscapes. Students will use a park map to recognize park structures and features; interpret and communicate information and apply map reading skills.

A Forest Grows (4 - 10 grades)

Duration: 45 minutes to an hour, plus travel time to and from study location

Activity type: Walking

Objective: Forests add to the diversity of plant and animal species. Through this activity students will discover some of the forest's reproductive processes. Students will investigate variation in seed structure and methods by



dispersal by: observing seed' physical appearance, evidence of tree' reproductive strategies; inferring possible relationships among types of seeds, seed dispersal methods and location of seedlings.

A Lot of Rot (4 - 8 grades)

Duration: 30 - 45 minutes

Activity type: Walking, stooping, sitting

Objective: A stump or a log in the woods provides a home for many, plant, animal and insect. Those organisms break down that organic material into something that can be reused, they are called decomposers; and are very important in any eco-system. Students will: locate and examine plant decomposition; identify some of the organism that live in and around a decaying log; understand that a rotting log serves a vital function in the forest and supports a wide variety of life.

Bats (4 - 7 grades)

Duration: 1 - 2 hours

Activity type: Walking - game

Objective: Echolocation is a tool that many bats use to determine size, shape, texture and speed of an object. The students will investigate bats by: participating in a role-play activity as a bat or insect; use the sense of hearing to locate other students simulating the process of echolocation

Native or Not (4 - 10 grades)

Duration: 45 minutes to 1 hour

Activity type: Walking

Objective: There are several exotic species all around us in the shape of plants, animals and insects. Students will investigate native and exotic species by: researching the ranges of selected species; identifying selected species and the habitats where they are found; counting individual organisms and colonies; observing animal behaviors; describing the location and spacing of plants; estimating the area affected by exotic species.

Sedimentary My Dear Watson (6 - 10 grades)

Duration: 1 hour

Activity type: Walking

Objective: Sediment is a solid material transported by moving water or wind. It is made up of various materials. Students will investigate the relationships between streams and sediment types by: formulating and testing a hypothesis about sediment type; making and recording field observations; graphing and interpreting date obtained by processing and measuring sediment samples; practice math skills including using a small sample to evaluate a larger sample; and recognize sources of error in measurement.



Changing of the Green (6 - 12 grades)

Duration: 45 minutes per location

Activity type: Walking

Objective: Many changes have taken place since Virginia was first explored by Capt. John Smith. One of the most obvious is the change in plant life from mostly forest and woody plants to pasture and grassy knolls. Students will investigate change in plant composition of quadrants of earlier and later succession stages by: predicting relative abundance of plants; distinguishing between herbaceous and woody plants; quantifying plants within a given space; and comparing actual ratios of plants.

When Winter Comes (4 - 12 grades)

Duration: 45 minutes to 1 hour

Activity type: Walking - game

Objective: Changing seasons and environments affect migration patterns. This activity will simulate the journey between nesting and wintering grounds. Students will investigate migration by: listing limiting factors that affect population of migrating birds; predicting the effects of such limiting factors; describing the effects of loss and degradation of habitat on populations of migrating birds; inferring about the importance of suitable habitat (places that satisfy food, water, and space requirements) for migrating birds.

